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Memorandum

To: Andrew Prophete (National Grid NY)

From: Brian Skelly

Copy to: Richard Dana and R. Scott Deyette (NYSDEC)
Chris Schroer (EA Engineering)
Andrew Rizk (Louis Berger)
Stephanie Selmer (NYSDOH)
Dave Boram and Thor Helgason (de maximis)
Ted Leissing (National Grid NY)
Shail Pandya (AECOM)
Ronell Marshall and Clayton John (GEI Consultants, Inc.)

Date: March 18, 2013

Regarding: Weekly Community Air Monitoring Report
Clifton Former MGP Site - Operable Unit 2 (OU-2)
March 9, 2013 through March 15, 2013

Dear Andrew:

This report includes a summary of data collected during implementation of the Community Air Monitoring Plan (CAMP) at the Clifton Former MGP Site Operable Unit 2 (OU-2) in Staten Island, New York. Data collected are discussed in relation to remediation activities that occurred between March 9, 2013 and March 15, 2013.

There were no fifteen-minute exceedances of the Total Volatile Organic Compounds (TVOC), Particulate Matter (PM-10) [dust], or odor action levels associated with ground intrusive site activities during this reporting period. The tables and figures accompanying this report summarize air monitoring results related to the action levels described by the CAMP Work Plan (AECOM, 2011 and GEI, 2012).

The following information is summarized in this report:

- Site construction activities
- Daily maximum 15-minute average concentrations of TVOC and PM-10 (dust) at each fixed station
- Elevated concentrations (if any)
- Meteorological data

Site Construction Activities

Construction activities during this reporting period included:

- Disassembled Temporary Fabric Structure (TFS)
- Deconned dumped trucks
- Demobilize TIGG unit
- Installed fence posts around perimeter of OU2
- Installed NAPL recovery wells in
- Loaded disassembled TFS material offsite via dump trucks
- Performed hot work on TFS foundation beams
- Received delivery of soil
- Relocated equipment around OU2
- Tarpred dump trucks

Data collection

Real-time fixed station monitoring for TVOC and PM-10 (dust) was performed on the OU-2 site perimeter at six locations (FAM#1 through FAM#6. Four AirLogics Classic stations equipped with gas chromatographs (GCs) were operated at FAM#2, FAM#3, FAM#4, and FAM#5 and two AirLogics Light stations were operated at FAM#1 and FAM#6.

Table 1 summarizes the target concentrations for action levels and Site Conditions described by the CAMP. Table 2 provides a daily summary of maximum fifteen-minute average ambient air concentrations from each station. The daily reports appended to this report depict more detailed and time-specific comparison of upwind and downwind measurements and site activities that is needed to determine the Site Condition.

Upwind and downwind ambient air verification samples were collected on March 15, 2013. Meteorological data collected at the on-site weather station are included in this report as Figures 1 through 4 which show a directional wind rose for the period and temperature, relative humidity, and wind speed time series for the period.

If you have any questions regarding the information in this report, please contact me.

Weekly Community Air Monitoring Report
Clifton Former MGP Site Operable Unit 2 (OU-2)
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References

AECOM (2011). Appendix A of CERP Community Air Monitoring Plan (CAMP) Former Manufactured Gas Plant Operable Unit - 2 Remediation. Clifton, New York. August.

GEI Consultants, Inc (2012). Community Air Monitoring Plan: Clifton Former Manufactured Gas Plant Site – Operable Unit 2, Borough of Staten Island, New York. February.

New York State Department of Environmental Conservation (2010). DER-10 / Technical Guidance for Site Remediation and Investigation. Washington: Division of Environmental Remediation, December. Appendix 1-A. May.

Table 1 - Action Levels and Site Conditions
Community Air Monitoring Program
Clifton Former MGP Site Operable Unit 2
Borough of Staten Island, New York

	Alert Level	Action Level	Site Condition 1	Site Condition 2	Site Condition 3
TVOC (15-minute)	3.7 ppm	5.0 ppm	< 3.7 ppm	≥ 3.7 ppm, < 5.0 ppm	≥ 5.0 ppm
TVOC (1-minute)	NA	25 ppm	< 25 ppm	NA	≥ 25 ppm
PM-10 (15-minute)	100 ug/m ³	150 ug/m ³	< 100 ug/m ³	≥ 100 ug/m ³ , < 150 ug/m ³	≥ 150 ug/m ³
Odor (15-minute)	Odors / Complaints	NA	No odors	NA	3 (n-butanol)
HCN (15-minute)	Visual Detection	NA	< 0.6 ppm	≥ 0.6 ppm (4-gas meter)	≥ 0.6 ppm (Draeger tube)
Naphthalene (15-minute)	NA	NA	< 440 ug/m ³	≥ 330 ug/m ³ , < 440 ug/m ³	≥ 440 ug/m ³

Notes:

¹ Alert Levels are not established by the NYSDOH or NYSDEC and are internally established concentration levels for total volatile organic compounds. Alert Levels are set below the levels established by the NYSDOH so that actions can be taken prior to exceeding a NYSDOH threshold. An Alert Level serves as a screening tool to trigger contingent measures if necessary, to assist in minimizing off-site transport of contaminants during remedial activities

² Response Levels and Action Levels are not defined in Appendix 1A of the New York State Department of Environmental Conservation *DER-10 / Technical Guidance for Site Investigation and Remediation* (NYSDEC, 2010)

ug/m³ - micrograms per cubic meter

ppmv - parts per million by volume

TVOC - total volatile organic compounds

PM-10 - particulate matter (i.e. dust) less than 10 microns in diameter

HCN - hydrogen cyanide

NA - not applicable

Table 2. Daily Maximum 15-Minute Average Concentrations of TVOC and PM-10
 Community Air Monitoring Program
 Clifton Former MGP Site Operable Unit 2
 Borough of Staten Island, New York

Date	TVOC						PM-10					
	(ppm)						(ug/m ³)					
	FAM#1	FAM#2	FAM#3	FAM#4	FAM#5	FAM#6	FAM#1	FAM#2	FAM#3	FAM#4	FAM#5	FAM#6
3/9/2013	0.2	0.2	0.2	0.1	0.2	0.0	45	16	3	13	29	9
3/10/2013	0.1	0.1	0.2	0.1	0.2	0.0	32	13	4	6	14	15
3/11/2013	0.1	0.5	0.1	0.5	0.4	0.0	31	18	5	21	19	13
3/12/2013	0.0	0.5	0.1	3.1	0.4	0.0	46	21	8	13	24	4
3/13/2013	0.0	0.1	0.0	0.1	0.2	0.1	30	24	6	5	14	11
3/14/2013	0.0	0.1	0.0	0.1	0.0	0.1	18	7	2	48	9	7
3/15/2013	0.3	0.2	0.0	0.2	0.2	0.1	37	19	9	47	21	11
Average	0.1	0.3	0.1	0.6	0.3	0.1	34	17	5	22	19	10
Maximum	0.3	0.5	0.2	3.1	0.4	0.1	46	24	9	48	29	15

Notes:

FAM - fixed air monitoring station location

ug/m³ - micrograms per cubic meter

ppmv - parts per million by volume

TVOC - total volatile organic compounds

PM-10 - particulate matter (i.e. dust) less than 10 microns in diameter

Figures 1-4
Meteorological Data
Weekly Community Air Monitoring Report
Clifton Former MGP Site Operable Unit 2
Borough of Staten Island, New York

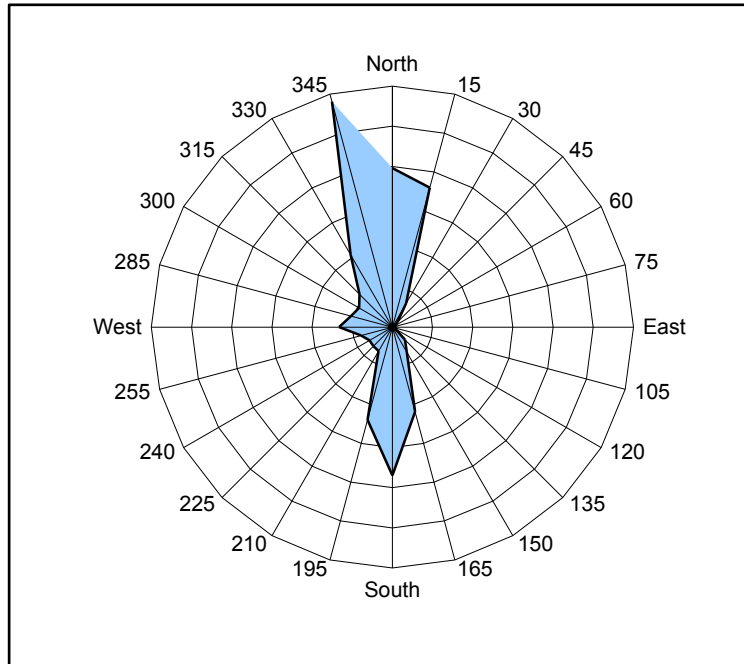


Figure 1. Wind rose for the period 03/08/13 through 03/15/13 collected during CAMP implementation at the Clifton Former MGP Site - Operable Unit 2. Wind direction data used to create the wind rose were calculated from 1-minute data.

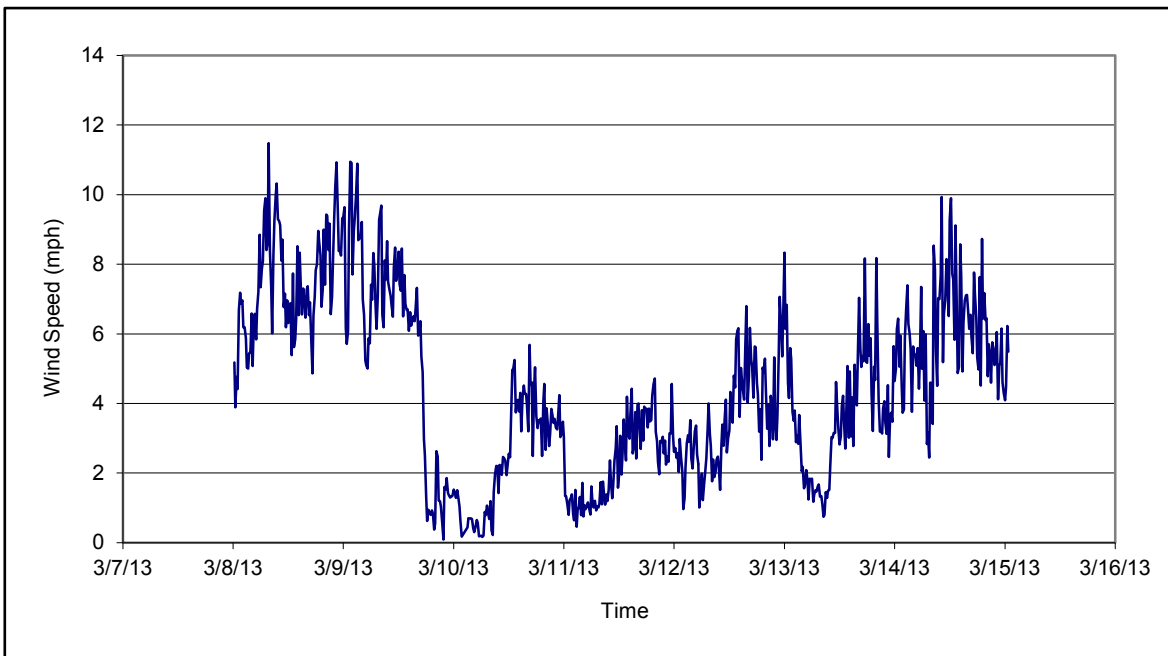


Figure 2. Wind speed for the period 03/08/13 through 03/15/13 collected during CAMP implementation at the Clifton Former MGP Site - Operable Unit 2. Data are 15-minute averages.

Figures 1-4
Meteorological Data
Weekly Community Air Monitoring Report
Clifton Former MGP Site Operable Unit 2
Borough of Staten Island, New York

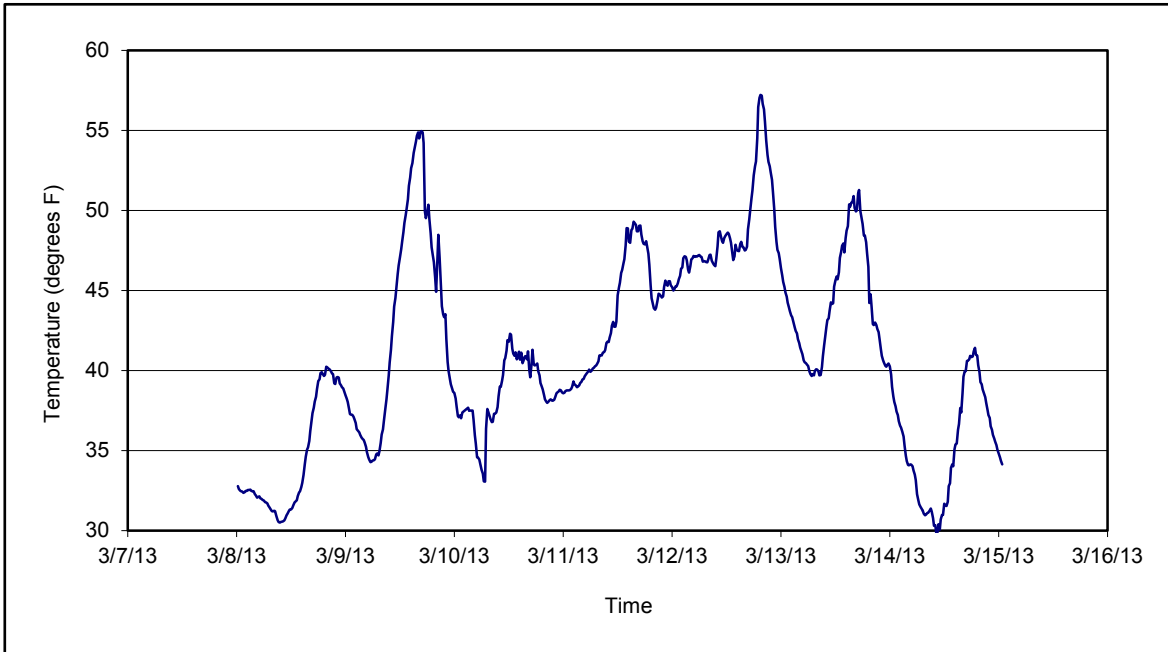


Figure 3. Temperature for the period 03/08/13 through 03/15/13 collected during CAMP implementation at the Clifton Former MGP Site - Operable Unit 2. Data are 15-minute averages.

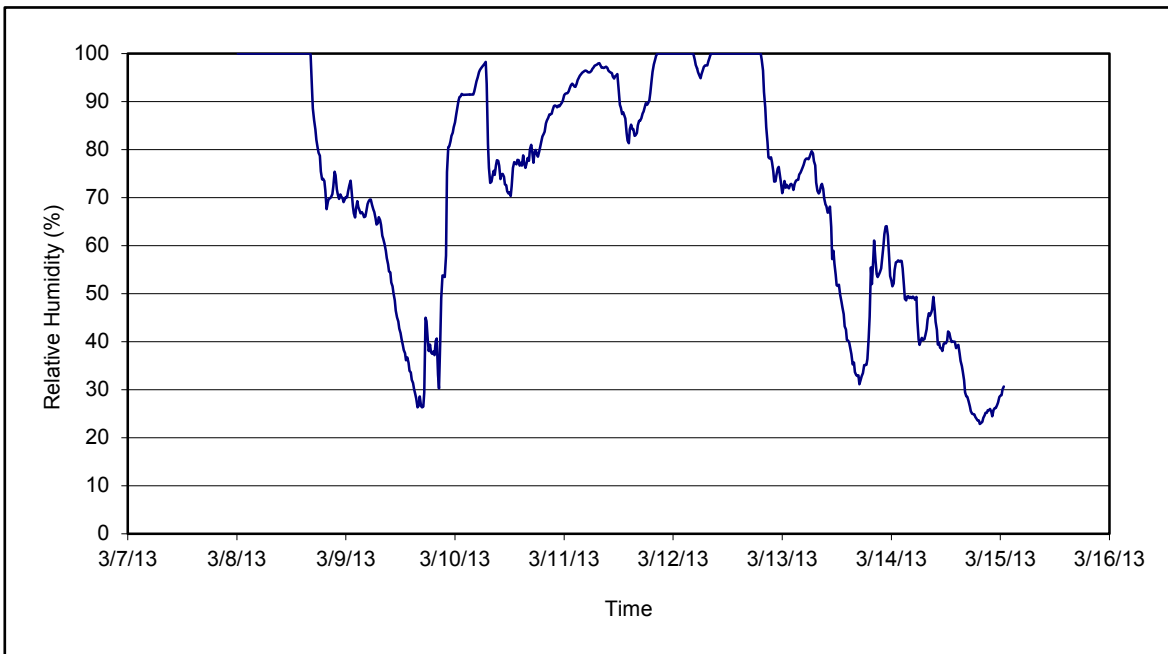


Figure 4. Relative humidity for the period 03/08/13 through 03/15/13 collected during CAMP implementation at the Clifton Former MGP Site - Operable Unit 2. Data are 15-minute averages.

Daily Field Report
 Community Air Monitoring Program
 Clifton Former MGP Site Operable Unit 2
 Borough of Staten Island, New York

System Operations					General Observations											
Sampling Date	3/11/2013	General Weather Conditions: Overcast - ~ 38°F - ~39°F General Description of Site Activities: Health & Safety Meeting Continuous Air Monitoring Disassembled Temporary Fabric Structure (TFS) Installed NAPL recovery wells Demobilize TIGG unit Relocating equipment around OU2														
System Start Time	continuous															
System Stop Time	continuous															
Total Hrs Monitored	24															
System Calibrations (Time/Status)	Ok 0843-1003															
Date	Alert Trigger	Station	Start Time	End Time	# of 15-min Periods	Wind Dir.	Upwind/Downwind	Upwind Station(s)	15-Minute Downwind-Upwind Concentration		Site Condition	Site Activity During the Period (if applicable)	Actions Taken			
3/11/13	No exceedances								Min**	Max**			None taken			
Comments:																
					PM-10 (15-min)				TVOC (15-min)			TVOC (1-min)	Odor Intensity (15-min)			
					Alert Limit:	100 ug/m ³				3.7 ppm			-			
					Action Limit:	150 ug/m ³				5.0 ppm			25 ppm			
												3 (n-butanol scale)				
Notes:																
* Wind directions are presented by octant (i.e. N, NE, E, SE, S, SW, W, NW).										PM-10 - particulate matter (i.e. dust) less than 10 microns in diameter						
** Upwind minus downwind concentrations are a time specific comparison.										TVOC - total volatile organic compounds						
FAM - Fixed Air Monitoring station location										NA - not applicable						
ug/m ³ - micrograms per cubic meter										ND - no data available						
ppmv - parts per million by volume												Field Representative:		C. John		
												Date:		3/11/2013		



Daily Field Report
Community Air Monitoring Program
Clifton Former MGP Site Operable Unit 2
Borough of Staten Island, New York

System Operations					General Observations										
Sampling Date	3/12/2013	General Weather Conditions: Overcast - ~ 38°F - ~39°F General Description of Site Activities: Health & Safety Meeting Continuous Air Monitoring Disassembled Temporary Fabric Structure (TFS) Installed NAPL recovery wells													
System Start Time	continuous														
System Stop Time	continuous														
Total Hrs Monitored	24														
System Calibrations (Time/Status)	Ok 0715-0953														
Date	Alert Trigger	Station	Start Time	End Time	# of 15-min Periods	Wind Dir.	Upwind/Downwind	Upwind Station(s)	15-Minute Downwind-Upwind Concentration Min** Max**		Site Condition	Site Activity During the Period (if applicable)	Actions Taken		
3/12/13	No exceedances												None taken		
Comments:															
					PM-10 (15-min)				TVOC (15-min)			TVOC (1-min)	Odor Intensity (15-min)		
					Alert Limit:	100 ug/m ³				3.7 ppm			-	-	
					Action Limit:	150 ug/m ³				5.0 ppm			25 ppm	3 (n-butanol scale)	
Notes: * Wind directions are presented by octant (i.e. N, NE, E, SE, S, SW, W, NW). ** Upwind minus downwind concentrations are a time specific comparison. FAM - Fixed Air Monitoring station location ug/m ³ - micrograms per cubic meter ppmv - parts per million by volume PM-10 - particulate matter (i.e. dust) less than 10 microns in diameter TVOC - total volatile organic compounds NA - not applicable ND - no data available Field Representative: R. Marshall Date: 3/12/2013															

Daily Field Report
Community Air Monitoring Program
Clifton Former MGP Site Operable Unit 2
Borough of Staten Island, New York

System Operations					General Observations								
Sampling Date		3/13/2013			General Weather Conditions: Clear - ~ 41°F - ~50°F								
System Start Time		continuous			General Description of Site Activities: Health & Safety Meeting Continuous Air Monitoring Disassembled Temporary Fabric Structure (TFS) Installed NAPL recovery wells Received delivery of soil								
System Stop Time		continuous											
Total Hrs Monitored		24											
System Calibrations (Time/Status)		Ok 0715-0953											
Date	Alert Trigger	Station	Start Time	End Time	# of 15-min Periods	Wind Dir.	Upwind/Downwind	Upwind Station(s)	15-Minute Downwind-Upwind Concentration Min** Max**		Site Condition	Site Activity During the Period (if applicable)	Actions Taken
3/13/13	No exceedances												None taken
Comments:													
					PM-10 (15-min)		TVOC (15-min)		TVOC (1-min)		Odor Intensity (15-min)		
					Alert Limit: 100 ug/m ³		3.7 ppm		-		-		
					Action Limit: 150 ug/m ³		5.0 ppm		25 ppm		3 (n-butanol scale)		
Notes:													
* Wind directions are presented by octant (i.e. N, NE, E, SE, S, SW, W, NW).					PM-10 - particulate matter (i.e. dust) less than 10 microns in diameter					TVOC - total volatile organic compounds			
** Upwind minus downwind concentrations are a time specific comparison.					NA - not applicable					Field Representative: R. Marshall			
FAM - Fixed Air Monitoring station location					ND - no data available					Date: 3/13/2013			
ug/m ³ - micrograms per cubic meter													
ppmv - parts per million by volume													



Daily Field Report
 Community Air Monitoring Program
 Clifton Former MGP Site Operable Unit 2
 Borough of Staten Island, New York

System Operations						General Observations							
Sampling Date	3/14/2013	General Weather Conditions: Clear - ~ 31°F - ~35°F General Description of Site Activities: Health & Safety Meeting Continuous Air Monitoring Disassembled Temporary Fabric Structure (TFS) Installed NAPL recovery wells Received delivery of soil Performed hot work on TFS foundation beams											
System Start Time	continuous												
System Stop Time	continuous												
Total Hrs Monitored	24												
System Calibrations (Time/Status)	Ok 0718-0923												
Date	Alert Trigger	Station	Start Time	End Time	# of 15-min Periods	Wind Dir.	Upwind/ Downwind	Upwind Station(s)	15-Minute Downwind-Upwind Concentration Min** Max**		Site Condition	Site Activity During the Period (if applicable)	Actions Taken
3/14/13	No exceedances												None taken
Comments:													
					PM-10 (15-min)		TVOC (15-min)		TVOC (1-min)		Odor Intensity (15-min)		
					Alert Limit: 100 ug/m ³		3.7 ppm		-		-		
					Action Limit: 150 ug/m ³		5.0 ppm		25 ppm		3 (n-butanol scale)		
Notes:													
* Wind directions are presented by octant (i.e. N, NE, E, SE, S, SW, W, NW).						PM-10 - particulate matter (i.e. dust) less than 10 microns in diameter							
** Upwind minus downwind concentrations are a time specific comparison.						TVOC - total volatile organic compounds							
FAM - Fixed Air Monitoring station location						NA - not applicable						Field Representative: R. Marshall	
ug/m ³ - micrograms per cubic meter						ND - no data available						Date: 3/14/2013	
ppmv - parts per million by volume													



Daily Field Report
Community Air Monitoring Program
Clifton Former MGP Site Operable Unit 2
Borough of Staten Island, New York

System Operations					General Observations								
Sampling Date		3/15/2013			General Weather Conditions: Clear - ~ 30°F - ~39°F								
System Start Time		continuous			General Description of Site Activities:								
System Stop Time		continuous			Health & Safety Meeting Continuous Air Monitoring Disassembled Temporary Fabric Structure (TFS) Installed NAPL recovery wells Received delivery of soil Installed fence posts around perimeter of OU2								
Total Hrs Monitored		24			Loaded disassembled TFS material offsite via dumptrucks Tarped dump trucks Decconned dumped trucks								
System Calibrations (Time/Status)		Ok 0652--0904											
Date	Alert Trigger	Station	Start Time	End Time	# of 15-min Periods	Wind Dir.	Upwind/ Downwind	Upwind Station(s)	15-Minute Downwind-Upwind Concentration Min** Max**		Site Condition	Site Activity During the Period (if applicable)	Actions Taken
3/15/13	No exceedances												None taken
Comments:													
						PM-10 (15-min)	TVOC (15-min)	TVOC (1-min)	Odor Intensity (15-min)				
						Alert Limit: 100 ug/m ³	3.7 ppm	-	-				
						Action Limit: 150 ug/m ³	5.0 ppm	25 ppm	3 (n-butanol scale)				
Notes: * Wind directions are presented by octant (i.e. N, NE, E, SE, S, SW, W, NW). ** Upwind minus downwind concentrations are a time specific comparison. FAM - Fixed Air Monitoring station location ug/m ³ - micrograms per cubic meter ppmv - parts per million by volume PM-10 - particulate matter (i.e. dust) less than 10 microns in diameter TVOC - total volatile organic compounds NA - not applicable ND - no data available Field Representative: R. Marshall Date: 3/15/2013													
													Page 1 of 1